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Remarks

Claims 1-13, 15-21, and 28-31 remain pending in the application.

The specification was objected to because of an informality.

Claim 11 was objected to because of an informality.

Claim 11 was rejected on the basis of 35 U.S.C. 112, first and second paragraphs. 1-13, 15-21, and 28-31.

Claims 1-3, 10-12, and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6,682,677 issued to Lobovsky et al. on January 27, 2004 in view of United States Patent Application Publication No. 2006/0099135 applied for by Yodh et al. and published on May 11, 2006. Claims 4-9, 13-14, 21, and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lobovsky et al. and Yodh et al. in further view of various other references.

Each of the various rejections and objections are overcome by amendments that are made to the specification, drawing, and/or claims, as well as, or in the alternative, by various arguments that are presented.

Any amendments to any claim for reasons other than as expressly recited herein as being for the purpose of distinguishing such claim from known prior art are not being made with an intent to change in any way the literal scope of such claims or the range of equivalents for such claims. They are being made simply to present language that is better in conformance with the form requirements of Title 35 of the United States Code or is simply clearer and easier to understand than the originally presented language. Any amendments to any claim expressly made in order to distinguish such claim from known prior art are being made only with an intent to change the literal scope of such claim in the most minimal way, i.e., to just avoid the prior art in a way that leaves the claim novel and not obvious in view of the cited prior art, and no equivalent of any subject matter remaining in the claim is intended to be surrendered.

Also, since a dependent claim inherently includes the recitations of the claim or chain of claims from which it depends, it is submitted that the scope and content of any dependent claims that have been herein rewritten in independent form is exactly the same as the scope and content of those claims prior to having been rewritten in independent

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form. That is, although by convention such rewritten claims are labeled herein as having been "amended," it is submitted that only the format, and not the content, of these claims has been changed. This is true whether a dependent claim has been rewritten to expressly include the limitations of those claims on which it formerly depended or whether an independent claim has been rewriting to include the limitations of claims that previously depended from it. Thus, by such rewriting no equivalent of any subject matter of the original dependent claim is intended to be surrendered. If the Examiner is of a different view, he is respectfully requested to so indicate.

Objection to the Specification

The specification has been corrected as suggested by the Office Action.

Objection to Claim 11

Claim 11 was objected to because of an informality, which applicants have corrected by removing the word "is" therefrom as suggested by the Office Action.

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Rejection Under 35 U.S.C. 112, First and Second Paragraphs

Claims 11 is rejected under 35 U.S.C. 112, first and second paragraphs, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Office Action finds objectionable the listing of the composition PS2067. These grounds of rejection are respectfully traversed for the following reason.

One of ordinary skill in the art could search the Internet for PS2067 and quickly obtain the following link: http://www.unitedchem.com/pdf/ELASTOMERS_RESINS.PDF, that would bring a pdf format document, page 2 of which defines and lists the properties of PS2067. Since, pursuant to 35 U.S.C. 112, the specification is required to contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention, and since PS2067 is the most concise and clear way to describe the applicable chemical, listing it both in the specification and the claims is appropriate and well understood by one of ordinary skill in the art.

Rejection Under 35 U.S.C. 103(a)

Claims 1-3, 10-12, and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6,682,677 issued to Lobovsky et al. on January 27, 2004 in view of United States Patent Application Publication No. 2006/0099135 applied for by Yodh et al. and published on May 11, 2006. Claims 4-9, 13-14, 21, and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lobovsky et al. and Yodh et al. in further view of various other references.

The Office Action states that Lobovsky et al. teaches all of the subject matter as recited in applicants' claims 1, 2, 10, 12, 19, and 20. However, continues the Office Action, Lobovsky et al. does not teach using a curable liquid and curing the liquid near the end of the tapering tube, as required by independent claims 1 and 19, or partially curing the liquid at locations before and after the end of the tapering tube, as required by claims 16 and 19. Lobovsky also does not teach using a UV curable liquid as required by claim

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11, or using UV light to cure, as required by claims 3 and 15, or providing a UV translucency, as required by claim 17. According to the Office Action, these deficiencies can be made up for, by combining Lobovsky et al. with Yodh et al., which teaches a curable precursor in paragraph 77.

To this end, the Office Action reasons that one of ordinary skill in the art would have found it obvious to locate the curing near the end of the tube, instead of upstream where a solid mass, if formed too soon, would clog the tube, or downstream, where a free-flowing liquid stream would break apart. The Office Action further reasons that one of ordinary skill in the art would recognize that the curing event could bridge the end of the tube in a relatively narrow region by progressively proceeding from partial cure to full such that the phase transitions neither blocks nor necks. (Note, this last sentence of the Office Action is not clear at all to applicants.) The Office Action further indicates that since Yodh et al. teaches using UV light to cure, by implication it teaches a UV curable precursor, and so it would have been obvious to one of ordinary skill in the art to provide the tube with a translucency to UV light. Lastly, the Office Action explains that Lobovsky and Yodh are combinable because they are both concerned with carbon nanotube filaments, and hence one of ordinary skill in the art would have found it obvious to include the curable matrix of Yodh in the method of Lobovsky, so as to eliminate the process steps of coagulating and drying the fiber.

This ground of rejection is respectfully traversed for the following reasons.

First, the process taught by Lobovsky et al. is a spinning process. By contrast, applicants' claims that remain in the application clearly do not relate to a spinning process, as was recognized in the preceding Office Action, dated May 1, 2006, which required the restriction of claims. At that time, the Office Action explained that restriction was necessary because the product of group II can be made by another process other than the process of group I, and in particular, the Office Action stated that the product of group II could be made by gel-spinning. Thus, the Office itself has essentially recognized that Lobovsky et al. is distinct from applicants' invention as claimed, given that Lobovsky et al. is a spinning process.

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Furthermore, applicants note that in its attempt to modify Lobovsky et al. by combining it with Yodh et al., the Office Action suggests as a motivation to do make such a combination the elimination of the process steps of coagulating and drying employed by Lobovsky et al. However, such coagulation is an essential step of the spinning process of Lobovsky et al., and the fiber can be drawn only after coagulation. Indeed, the entire point of Lobovsky et al. is to use coagulation spinning (CS) of the art prior to Lobovsky et al. but to do so using pure carbon nanotubes. Thus, one of ordinary skill in the art would not look to modify Lobovsky et al. to eliminate coagulation therefrom, since doing so would destroy the fundamental nature of Lobovsky et al.

Moreover, even if one were to straightforwardly combine Lobovsky et al. and Yodh et al., without invention, i.e., without attempting to improperly employ hindsight from applicants' invention, the result would be a coagulation spinning process using the arrangement of Lobovsky et al. but where that which is spun is a dispersion using a surfactant as described in Yodh et al. Clearly this is not applicants' invention as claimed.

Since each of the remaining rejections is predicated on the validity of the aforementioned rejections based on the combination of Lobovsky et al. and Yodh et al. which are traversed hereinabove, and since none of the additional references are cited as curing, or are believed to cure, the deficiencies pointed out with regard to the combination of Lobovsky et al. and Yodh et al., the remaining rejections cannot stand for at least the same reasons given above.

Therefore, applicants' claims are allowable over under 35 U.S.C. 103(a).

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Conclusion

It is respectfully submitted that the Office Action's rejections have been overcome and that this application is now in condition for allowance. Reconsideration and allowance are, therefore, respectfully solicited.

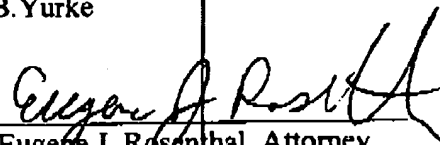
If, however, the Examiner still believes that there are unresolved issues, he is invited to call applicant's attorney so that arrangements may be made to discuss and resolve any such issues.

In the event that an extension of time is required for this amendment to be considered timely, and a petition therefor does not otherwise accompany this amendment, any necessary extension of time is hereby petitioned for, and the Commissioner is authorized to charge the appropriate cost of such petition to the Lucent Technologies Deposit Account No. 12-2325.

Respectfully,

D. S. Greywall
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By


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Lucent Technologies Inc.

Date: 11/16/06